Section 1 – Identification of the Material and Supplier

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Chemical nature: Water solution of Quaternary ammonium compounds and other ingredients.
Trade Name: CRUSADER
Product Use: Disinfectant, deodorizer and cleaner.
Creation Date: August, 2013
This version issued: September, 2016 and is valid for 5 years from this date.

Section 2 – Hazards Identification

GHS Pictogram

GHS05: Corrosion.
GHS09: Environment.

GHS Signal word: DANGER

HAZARD CLASSIFICATION
- Serious eye damage.
- Skin irritation.

HAZARD STATEMENT:
- H318: Causes serious eye damage.
- P315: Causes skin irritation.
- H412: Harmful to aquatic life with long lasting effects.

PREVENTION
- P102: Keep out of reach of children.
- P264: Wash affected areas thoroughly after handling.
- P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE
- P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
- P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Wash with plenty of soap and water.
- P363: Wash contaminated clothing before reuse.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P390: Absorb spillage to prevent material damage.
- P391: Collect spillage.
- P370+P378: Not combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires.

STORAGE
- P402+P404: Store in a dry place. Store in a closed container.

DISPOSAL
- P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.
Emergency Overview

Physical Description & Colour: Green mobile liquid.
Odour: Mild odour.
Major Health Hazards: Causes serious eye damage. Causes skin irritation.
SUSMP Classification: S5 (CAUTION).

Potential Health Effects

Inhalation:
Short Term Exposure: Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.
Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:
Short Term Exposure: Available data indicates that this product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.
Long Term Exposure: Repeated exposure may cause skin dryness or cracking.

Eye Contact:
Short Term Exposure: Causes severe eye damage. Severe eye irritation, watering and redness, can cause burns to the eye. Risk of serious or permanent eye lesions.
Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:
Short Term Exposure: Significant oral exposure is considered to be unlikely. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.
Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:
SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 3 – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc., %</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkylbenzyldimethyl ammonium chloride</td>
<td>68424-85-1</td>
<td>10-15</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td>secret</td>
<td>to 100</td>
<td>not set</td>
<td>not set</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 – First Aid Measures

General Information:
You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 11 26 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.
Skin Contact: Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g.
watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

**Eye Contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

### Section 5 – Fire Fighting Measures

**Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product are likely to be irritating if inhaled. **Extinguishing Media:** Not combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses. **Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.

- **Flash point:** Does not burn.
- **Upper Flammability Limit:** Does not burn.
- **Lower Flammability Limit:** Does not burn.
- **Autoignition temperature:** Not applicable - does not burn.
- **Flammability Class:** Does not burn.

### Section 6 – Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

### Section 7 – Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10. **Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimise contamination. Make sure that the product does not come into contact with substances listed under “Incompatibilities” in Section 10. If you keep more than 10000kg or L of Dangerous Goods of Packaging Group III, you may be required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

### Section 8 – Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

- **Respiratory equipment:** AS/NZS 1715. **Protective Gloves:** AS 2161. **Occupational Protective Clothing:** AS/NZS 4501 set 2008, **Industrial Eye Protection:** AS1336 and AS/NZS 1337, **Occupational Protective Footwear:** AS/NZS2210.

#### SWA Exposure Limits

- **TWA (mg/m³):**
- **STEL (mg/m³):**

Exposure limits have not been established by SWA for any of the significant ingredients in this product.
Section 9 – Physical and Chemical Properties:

Physical Description & colour: Green mobile liquid.
Odour: Mild odour.
Boiling Point: Approximately 100°C at 100kPa.
Freezing/Melting Point: Below 0°C.
Vapour Pressure: 2.37 kPa at 20°C (water vapour pressure).
Vapour Density: As for water.
Specific Gravity: 1.035
Water Solubility: Completely soluble in water.
Water Solubility: 1.035
Water Solubility: 11-12
Volatility: No data.
Odour Threshold: No data.
Evaporation Rate: As for water.
Coefficient Oil/water Distribution: No data
Autoignition temp: Not applicable - does not burn.

Section 10 – Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to Avoid: Keep containers tightly closed. Keep isolated from combustible materials.
Incompatibilities: oxidising agents, anionic surfactants such as soap.
Fire Decomposition: This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form hydrogen chloride gas, other compounds of chlorine. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.
Polymerisation: This product will not undergo polymerisation reactions.

Section 11 – Toxicological Information

Local Effects:
Target Organs: There is no data to hand indicating any particular target organs.

Classification of Hazardous Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkylbenzyl(dimethyl) ammonium chloride</td>
<td>H301+H331: Toxic if swallowed or if inhaled.</td>
</tr>
</tbody>
</table>
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H400: Very toxic to aquatic life.

Health Effects – Acute
Swallowed: May be irritating to digestive system if swallowed.
Eye: Causes serious eye damage.
Skin: Causes skin irritation.
Inhaled: Avoid breathing vapour, spray or fumes.
Alkylbenzyldimethyl Ammonium Chloride: LD$_{50}$ Oral, Rat 400mg/kg

Section 12 – Ecological Information
Harmful to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

Section 13 – Disposal Considerations
Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 – Transport Information
ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 – Regulatory Information
AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations. The following ingredient: Alkylbenzyldimethyl ammonium chloride, is mentioned in the SUSMP.

Section 16 – Other Information
This SDS contains only safety-related information. For other data see product literature.

Emergency Contact: Phone 13 11 26 (Australia wide)

Acronyms:
ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
AICS: Australian Inventory of Chemical Substances
SWA: Safe Work Australia, formerly ASCC and NOHSC
CAS number: Chemical Abstracts Service Registry Number
Hazchem Code: Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC: International Agency for Research on Cancer
NOS: Not otherwise specified
NTP: National Toxicology Program (USA)
R-Phrase: Risk Phrase
SUSMP: Standard for the Uniform Scheduling of Medicines & Poisons
UN Number: United Nations Number

Please read all labels carefully before using product.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
End of Safety Data Sheet